## APPENDIX 1

12. A method of manufacturing a vehicle part comprising:

a. contacting a vehicle part having a surface containing hydroxyl groups with a non-aqueous solvent comprising a material comprising chlorosilyl groups to form a siloxane-based film on the vehicle part surface; and

b. coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group, represented by the formula: $CF_3$-$(CF_2)_n$-$(R)_m$-$SiX_pCl_{3-p}$ where n represents 0 or an integer; R represents an alkylene group or a hydrocarbon substituted group containing C=C or C≡C, a silicon atom or an oxygen atom; m represents 0 or 1, X represents a hydrogen atom or an alkyl group; p represents 0, 1 or 2.

13. The method of claim 12, wherein said material comprising chlorosilyl groups is selected from the group consisting of $SiCl_4$, $SiHCl_3$, $SiH_2Cl_2$ and Cl-$(SiCl_2O)_n$-$SiCl_3$, wherein n is an integer.

14. The method of claim 12, wherein p represents 0.

15. A vehicle part made by the method of claim 12.

16. A method of applying a fluorocarbon-based polymer coating film to an apparatus comprising:

a. contacting an apparatus having a surface containing hydroxyl groups with a non-aqueous solvent comprising a material comprising chlorosilyl groups to form a siloxane-based film on the apparatus surface; and

b. coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group, represented by the formula: $CF_3$-$(CF_2)_n$-$(R)_m$-$SiX_pCl_{3-p}$ where n represents 0 or an integer; R represents an alkylene group or a hydrocarbon substituted group containing C=C or C≡C, a silicon atom or an oxygen atom; m represents 0 or 1, X represents a hydrogen atom or an alkyl group; p represents 0, 1 or 2.

17. The method of manufacturing the fluorocarbon-based polymer coating film according to claim 12, wherein the compound comprising a fluorocarbon group and a alkoxysilyl group is represented by:

$CF_3$-$(CF_2)_n$-$(R)_m$-$SiY_q(OA')_{3-q}$

where n represents 0 or an integer;

R represents an alkylene group or a hydrocarbon substituted group containing C=C or C≡ C, a silicon atom or an oxygen atom;

m represents 0 or 1;

Y represents a hydrogen atom, an alkyl group, an alkoxy group, a fluorine-containing alkoxy group or a fluorine-containing alkyl group;

OA' represents an alkoxy group; and

q' represents 0, 1 or 2;

and the method further comprises a step of baking the substrate after coating.

18. The method of claim 16, wherein p represents 0.

19. The method of claim 16, wherein the apparatus is an electric apparatus, a vehicle or an industrial apparatus.

20. An apparatus made by the method of claim 16.

21. A method of producing a fluorocarbon-based coating film on a glass substrate comprising:

depositing a siloxane-based inner layer on a surface of the glass; and

coating the siloxane-based inner layer with a compound comprising (1) a fluorocarbon group and a chlorosilyl group or (2) a fluorocarbon group and an alkoxysilyl group.

22. A product made by the process of claim 16.

23. A product made by the process of claim 17.

24. A product made by the process of claim 18.

25. A product made by the process of claim 20.

26. A product made by the process of claim 21.

27. A method of manufacturing a fluorocarbon-based polymer coating film comprising:

a. contacting a substrate having a surface containing hydroxyl groups with a non-aqueous solvent comprising a material comprising chlorosilyl groups to form a siloxane-based film on the substrate surface;

b. washing the contacted substrate with a non-aqueous solvent to remove unreacted material; and

c. coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group, represented by the formula: $CF_3$-$(CF_2)_n$-$(R)_m$-$SiX_pCl_{3-p}$ where n represents 0 or an integer; R represents an alkylene group or a hydrocarbon substituted group containing C=C or C≡C, a silicon atom or an oxygen atom; m represents 0 or 1, X represents a hydrogen atom or an alkyl group; p represents 0, 1 or 2.

28. The method of manufacturing a fluorocarbon-based polymer coating film according to claim 27, wherein the substrate is selected from the group consisting of glass, metals, plastics, and ceramics.

29. The method of manufacturing a fluorocarbon-based polymer coating film according to claim 27, wherein the substrate is a plastic material treated in a plasma atmosphere containing oxygen.

30. The method of manufacturing a fluorocarbon-based polymer coating film according to claim 27, wherein said material comprising chlorosilyl groups is selected from the group consisting of $SiCl_4$, $SiHCl_3$, $SiH_2Cl_2$, and $Cl\text{-}(SiCl_2O)_n\text{-}SiCl_3$, wherein n is an integer.

31. A production method of an apparatus comprising a part comprising a fluorocarbon-based polymer coating film comprising:

a. contacting the part having a surface containing hydroxyl groups with a non-aqueous solvent comprising a material comprising chlorosilyl groups to form a siloxane-based film on the apparatus surface; and

b. coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group, represented by the formula: $CF_3\text{-}(CF_2)_n\text{-}(R)_m\text{-}SiX_pCl_{3-p}$ where n represents 0 or an integer; R represents an alkylene group or a hydrocarbon substituted group containing C=C or C≡ C, a silicon atom or an oxygen atom; m represents 0 or 1, X represents a hydrogen atom or an alkoxy group; p represents 0, 1 or 2.

32. A production method of claim 31, wherein said material comprising chlorosilyl groups is selected from the group consisting of $SiCl_4$, $SiHCl_3$, $SiH_2Cl_2$ and $Cl\text{-}(SiCl_2O)_n\text{-}SiCl_3$, wherein n is an integer.

33. A production method of claim 31, wherein p represents 0.

34. A production method of claim 31, wherein the apparatus is an electric apparatus, a vehicle or an industrial apparatus.

35. A apparatus made by the method of claim 34.

36. The method of claim 27, wherein the vehicle part is made of the member of a group consisting of glass, metals, plastics and ceramics.

37. The method of claim 31, wherein the part is selected from the group consisting of glass, metals, plastics and ceramics.

38. A method of manufacturing a vehicle part comprising:

forming a siloxane-based film on the vehicle part surface; and

coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group.

39. The method of claim 38, wherein the siloxane-based film is made with a material comprising chlorosilyl groups selected from the group consisting of $SiCl_4$, $SiHCl_3$, $SiH_2Cl_2$ and $Cl-(SiC_2O)_n-SiCl_3$, wherein n is an integer.

40. The method of claim 38, wherein the vehicle part is a window glass of a vehicle.

41. A production method of an apparatus having a part applied with a fluorocarbon-based polymer coating film comprising:

forming a siloxane-based film on the part surface; and

coating the siloxane-based film with a non-aqueous solvent comprising a compound comprising a fluorocarbon group and a chlorosilyl group.

42. The method of claim 41, wherein the siloxane-based film is made with a material comprising chlorosilyl groups selected from the group consisting of $SiCl_4$, $SiHCl_3$, $SiH_2Cl_2$ and $Cl-(SiC_2O)_n-SiCl_3$, wherein n is an integer.

43. The production method of claim 41, wherein the apparatus is an electric apparatus, a vehicle or an industrial apparatus.

44. An apparatus made by the method of claim 43.

45. The apparatus of claim 44, wherein the apparatus is a vehicle.